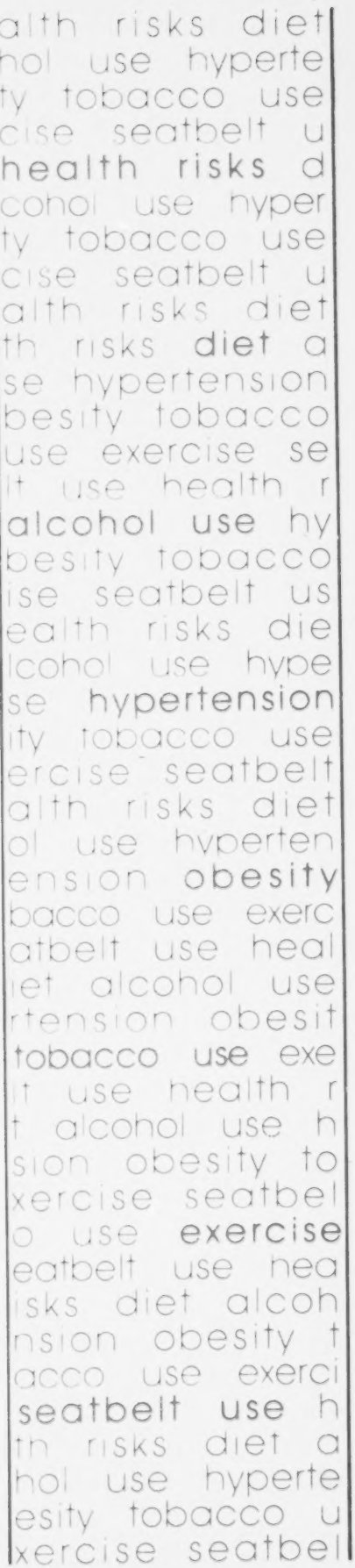
1989
South Dakota
Behavioral Risk Factor Survey
Report



South Dakota Department of Health

1989 SOUTH DAKOTA
BEHAVIORAL RISK FACTOR SURVEY REPORT

South Dakota Department of Health
Charles A. Anderson, Ed.D.
Secretary

Report Prepared
by the
Center for Health Policy and Statistics
523 East Capitol Avenue
Pierre, South Dakota 57501-3182
(605) 773-3693

Supported by the Centers for Disease Control
Center for Chronic Disease Prevention and Health Promotion
Cooperative Agreement No. U58/CCU802108-04

May 1990

ACKNOWLEDGEMENTS

Many thanks to the survey staff whose hard work dedication makes the South Dakota Behavioral Risk Factor Surveillance System survey a success.

Supervisor

Deb Gregg

Interviewers

Sherry Badger
Betty Dunwoody
Nancy Dunwoody
Jean Regynski
Millie Thielen
Helen Weischedel

TABLE OF CONTENTS

Risk Factor Definitions.....i

Executive Summary.....ii

Introduction.....iv

Survey Results

- Seat Belt Use.....1
- Hypertension.....5
- Exercise.....8
- Weight Control Practices.....12
- Cigarette Smoking.....16
- Alcohol Use.....19
- Preventive Health Practices.....23

Conclusion.....28

Appendices

- Technical Notes.....A-1
- 1989 South Dakota Behavioral Risk Factor Questionnaire.....B-1

LIST OF TABLES

Table 1. At Risk for Lack of Seat Belt Use....2

Table 2. Frequency of Seat Belt Use By Age....4

Table 3. At Risk for Hypertension....6

Table 4. At Risk for Sedentary Lifestyle....9

Table 5. Most Frequently Reported Physical Activities....10

Table 6. Physical Activity Level By Sex and Age....11

Table 7. At Risk for Being Overweight (Based on Percent of Median)....13

Table 8. At Risk for Cigarette Smoking....17

Table 9. At Risk for Acute Drinking....20

Table 10. At Risk for Chronic Drinking By Sex and Age....21

Table 11. At Risk for Drinking and Driving By Sex and Age....21

Table 12. Percent of South Dakota Women Having Ever Had a Mammogram By Income....26

Table 13. How Long Since Last Mammogram By Income....27

Table 14. Percentage and Estimated Number of South Dakotans At Risk By Specific Risk Factor....28

Table 15. South Dakota Quality Control Measures....A-2

Table 16. Demographic Summary of Survey Population....A-4

Table 17. Household Income of Survey Population....A-4

Table 18. Marital Status of Survey Population....A-5

Table 19. Level of Education of Survey Population....A-5

Table 20. Employment Status of Survey Population....A-5

LIST OF FIGURES

Figure 1. Frequency of Seat Belt Use....3

Figure 2. Frequency of Seat Belt Use By Sex....3

Figure 3. Current Hypertensives By Sex....7

Figure 4. Taking Prescribed Medication By Sex....7

Figure 5. Physical Activity Level....10

Figure 6. Distribution of Weight Categories....14

Figure 7. Percent of South Dakotans Now Trying To Lose Weight....14

Figure 8. Methods of Attempted Weight Reduction....15

Figure 9. Smoking Status By Sex....18

Figure 10. Current Smokers By Sex and Age....18

Figure 11. At Risk for Alcohol Use....22

Figure 12. How Long Since Last Routine Checkup....23

Figure 13. Type of Doctor Seen for Last Routine Checkup....23

Figure 14. How Long Since Blood Cholesterol Last Checked....24

Figure 15. How Long Since Last Mammogram....25

Figure 16. Reason for Having Last Mammogram....25

Figure 17. Most Important Reason for Not Having a Mammogram Within the Past Year....26

Figure 18. How Long Since Last Pap Smear Test....27

RISK FACTOR DEFINITIONS

Lack of Seat Belt Use	Respondents reporting they "sometimes", "seldom" or "never" use seat belts.
Current Hypertensive	Respondents reporting they have been told their blood pressure is high more than once, or are on medication, or report their blood pressure is still high. This data item has been added to define "current hypertensives", a reflection of the known, diagnosed hypertensives in the population. This is the National Heart, Lung, and Blood Institutes definition.
Uncontrolled Hypertensive	Respondents reporting they have ever been told they are hypertensive and their blood pressure is "still high".
Overweight (based on percent of median)	Respondents reporting being at or above 120% of ideal weight. Ideal weight is defined as the mid-value of a medium frame person from the 1959 Metropolitan Height-Weight tables.
Overweight (based on body mass index)	Females with a body mass index (weight in kilograms divided by height in meters squared (W/H**2)) greater than or equal to 27.3 and males with a body mass index greater than or equal to 27.8.
Sedentary Lifestyle	Respondents reporting sedentary or irregular activity levels.
Cigarette Smoking	Current regular smoker (ever smoked 100 cigarettes and smoke now).
Acute Drinking	Respondents reporting they have had five or more drinks on an occasion, one or more times in the past month.
Chronic Drinking	Respondent reporting they have had an average of 60 or more alcoholic drinks a month.
Drinking and Driving	Respondents reporting they have driven after having too much to drink one or more times in the past month.

EXECUTIVE SUMMARY

The South Dakota Behavioral Risk Factor Surveillance System (BRFSS) is a project of the South Dakota Department of Health through a cooperative agreement with the Centers for Disease Control (CDC). South Dakota has been collecting data on the self-reported health behaviors and associated risk factors of the adult population (age 18 and older) of the state since 1987. The BRFSS survey was designed to assess the self-reported health habits of adults and their impact on the leading causes of death, chronic disease and injury.

During 1989, telephone numbers were randomly selected and 1,784 South Dakota adults were surveyed on a variety of behavioral risk factor topics including

*seat belt use
*hypertension
*exercise
*weight control practices
*cigarette smoking
*alcohol use
*preventive health practices

This report describes the results of the interviews conducted on the adult population of South Dakota during 1989.

Seat Belt Use

In spite of the many studies suggesting the use of seat belts can reduce motor vehicle deaths and injuries, 61.9% of the adult South Dakota population sampled reported not wearing their seat belts on a regular basis.

Hypertension

Approximately 16% of the respondents interviewed reported being at risk for hypertension. Of those, 45% reported their blood pressure was under control and 7.6% reported their blood pressure was still high.

Exercise

An estimated 37% of all adult South Dakotans reported they exercised regularly in 1989. The activity most often reported as the primary form of activity was walking.

Weight Control Practices

An estimated 25.4% of the adult South Dakota population are considered to be "at risk" for overweight (120% or more above "ideal" body weight). Over 30% of adult South Dakotans were on a diet to lose weight (38.0% female vs. 21.9% males). Younger females were more likely to diet than males of the same age.

Cigarette Smoking

The prevalence of self reported smoking in South Dakota in 1989 was 21.8%. Over 21% of the survey respondents reported being former smokers.

Alcohol Use

Alcohol use was assessed using three categories: (1) acute drinking, (2) chronic drinking, and (3) drinking and driving. In 1989, 17.8% reported being at risk for acute drinking, 2.8% were at risk for chronic drinking, and 4.9% of the survey population reported being at risk for drinking and driving on more than one occasion during the past month.

Preventive Health Practices

Routine Checkups - Nearly 62% of the survey population reported having a routine checkup within the past year.

Blood Cholesterol - Over 52% of the respondents reported ever having their cholesterol checked, with 81.8% of those having it checked within the past year.

Mammograms - Only 40.6% of the female population reported having ever had a mammogram. The most important reason given for not having a mammogram in the last year was it was not needed (39.1%).

Pap Smear Tests - Nearly 65% of the female survey respondents reported having a pap smear test within the past year.

INTRODUCTION

In 1989, South Dakota was one of 46 states working with the Centers for Disease Control to monitor self-reported health behaviors and associated risk factors of the South Dakota adult population (age 18 and older) through the Behavioral Risk Factor Surveillance System (BRFSS).

Data collected during the year covered topics such as seat belt use, hypertension, exercise, weight control practices, cigarette smoking, alcohol use, and preventive health practices. These data are used by the Department of Health to identify those groups of South Dakotans with certain lifestyles and behaviors which put them "at risk" for adverse health outcomes. After those "at risk" groups have been identified, the Department of Health develops and implements health education programs specifically targeted to those groups.

Technical notes are provided in Appendix A. A copy of the 1989 BRFSS questionnaire is included in Appendix B.

SURVEY RESULTS

SEAT BELT USE

An estimated 61.9% of the adult population of South Dakota are considered to be "at risk" for lack of seat belt use (see Figure 1). Those considered to be "at risk" are those respondents who report they sometimes, seldom, or never wear their seat belt.

Males were less likely to wear seat belts than females. A review of risk by age showed 45-54 year olds used seat belts less often than other age groups (68.1% considered "at risk"). The lowest risk prevalence by age was for 25-34 year olds at 58.2%. Persons who were married were more likely to use seat belts than other groups when classed by marital status. By education, respondents with a post-graduate college education were at least risk at 34.2% while those with some technical school were at highest risk at 81.1%. When considering income, those respondents with a reported annual income of between $35,000 and $50,000 were at least risk while those in the $10-$15,000 income range were at greatest risk. See Table 1.

The frequency of seat belt use by sex is shown in Figure 2 while Table 2 shows the frequency of seat belt usage by age.

Table 1
At Risk for Lack of Seat Belt Use
By Selected Demographic Characteristics, 1989

TOTAL	N	% *
	652	61.9%

Sex	N	%
Male	512	65.0%
Female	601	59.0%

Age	N	%
18-24	122	58.9%
25-34	246	58.2%
35-44	202	59.7%
45-54	132	68.1%
55-64	142	65.6%
65 and over	269	64.5%

Race	N	%
White	1,069	62.5%
Black	3	26.7%
Hispanic	10	48.5%
Other	31	60.7%

Income	N	%
< $10,000	246	66.8%
$10-$15,000	196	69.6%
$15-$20,000	145	65.4%
$20-$25,000	128	61.7%
$25-$35,000	142	57.0%
$35-$50,000	83	49.5%
Over $50,000	62	52.9%
Unknown/Refused	111	63.7%

Marital Status	N	%
Married	662	61.5%
Divorced	115	69.4%
Widowed	142	64.6%
Separated	15	70.0%
Never Married	167	59.2%
Unmarried Couple	11	65.7%
Unknown/Refused	1	30.8%

Education	N	%
<9th grade	127	76.3%
Some high school	108	71.9%
High school grad.	425	69.1%
Some tech. school	41	81.1%
Tech school grad.	45	72.3%
Some college	221	58.2%
College graduate	96	40.4%
Post graduate	48	34.2

Employment	N	%
Employed	505	59.6%
Self-employed	204	73.7%
Out-of-work >1 year	21	73.1%
Out-of-work <1 year	22	58.4%
Homemaker	67	57.1%
Student	42	52.2%
Retired	252	62.0%

N = Number of respondents in this category.
% - Weighted percentage of respondents in this category.

*This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1987 population estimates from the State Data Center at the University of South Dakota, Vermillion.

Figure 1

Frequency of Seat Belt Use

Figure 2

Frequency of Seat Belt Use By Sex

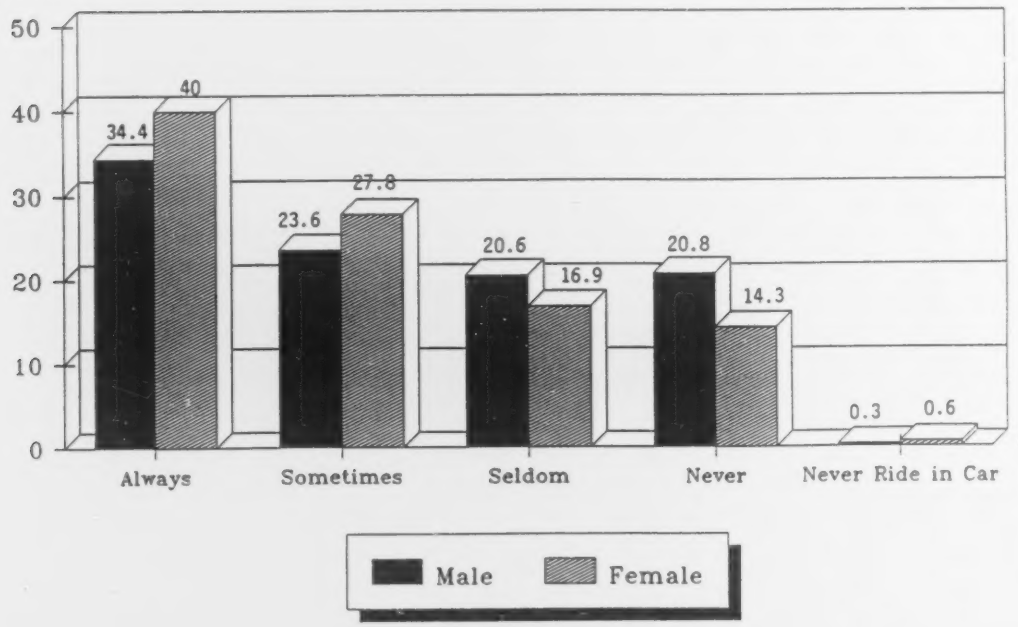


Table 2
Frequency of Seat Belt Use By Age, 1989

	Always or Nearly Always	Sometimes	Seldom	Never	Never Ride in a Car	Unknown/ Refused
18-24	40.8%	21.7%	22.1%	15.2%	-	0.3%
25-34	41.7%	27.5%	17.5%	13.2%	0.1%	-
35-44	39.9%	24.1%	20.7%	14.9%	-	0.3%
45-54	31.7%	31.3%	16.7%	20.0%	0.2%	-
55-64	34.1%	28.5%	18.0%	19.1%	0.2%	-
65+	32.4%	23.3%	17.3%	23.9%	1.8%	1.3%

HYPERTENSION

Hypertension is a major risk factor for both heart disease and stroke. For the purposes of the Behavioral Risk Factor survey, "at risk" for hypertension is defined as those respondents who report they have been told their blood pressure is high more than once, are on medication, or report their blood pressure is still high.

Based on this definition, 15.6% of survey respondents are considered at risk for hypertension (see Table 3). Women were at greater risk than men, 17.9% versus 13.2%. As might be expected, those individuals in the 65 and older age group were at greatest risk for high blood pressure at 39.4%. Approximately 45% reported their high blood pressure was under control while 7.6% of the current reported hypertensives reported their blood pressure was still high. Figure 3 shows the status of current hypertensives by sex.

Nearly 20% of the respondents have been told their blood pressure is high and of those, 69.3% have been told this more than once. Medication to control high blood pressure was prescribed to 63.8% of the hypertensive respondents. Figure 4 gives a breakdown by sex of respondents taking prescribed medication.

Table 3
At Risk for Hypertension
By Selected Demographic Characteristics, 1989

TOTAL	N	% *
	303	15.6%

Sex	N	%
Male	108	13.2%
Female	195	17.9%

Age	N	%
18-24	5	2.0%
25-34	16	3.7%
35-44	24	7.2%
45-54	31	15.3%
55-64	65	29.8%
65 and over	162	39.4%

Race	N	%
White	294	15.9%
Black	2	16.6%
Hispanic	2	6.6%
Other	5	8.8%

Income	N	%
< $10,000	85	20.5%
$10-$15,000	53	18.7%
$15-$20,000	35	14.4%
$20-$25,000	24	11.7%
$25-$35,000	32	13.5%
$35-$50,000	22	12.6%
Over $50,000	13	11.1%
Unknown/Refused	39	18.2%

Marital Status	N	%
Married	166	15.6%
Divorced	26	15.6%
Widowed	90	42.7%
Separated	2	12.0%
Never Married	18	4.6%
Unmarried Couple	1	5.0%
Unknown/Refused	-	-

Education	N	%
<9th grade	60	35.1%
Some high school	44	23.9%
High school grad.	93	14.1%
Some tech. school	6	9.8%
Tech school grad.	5	7.8%
Some college	47	11.8%
College graduate	32	13.8%
Post graduate	15	10.9%

Employment	N	%
Employed	88	10.3%
Self-employed	29	9.0%
Out-of-work >1 year	4	13.3%
Out-of-work <1 year	4	11.0%
Homemaker	22	18.4%
Student	1	0.5%
Retired	155	39.1%

N = Number of respondents in this category.
% - Weighted percentage of respondents in this category.

*This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1897 population estimates from the State Data Center at the University of South Dakota, Vermillion.

Figure 3

Current Hypertensives By Sex

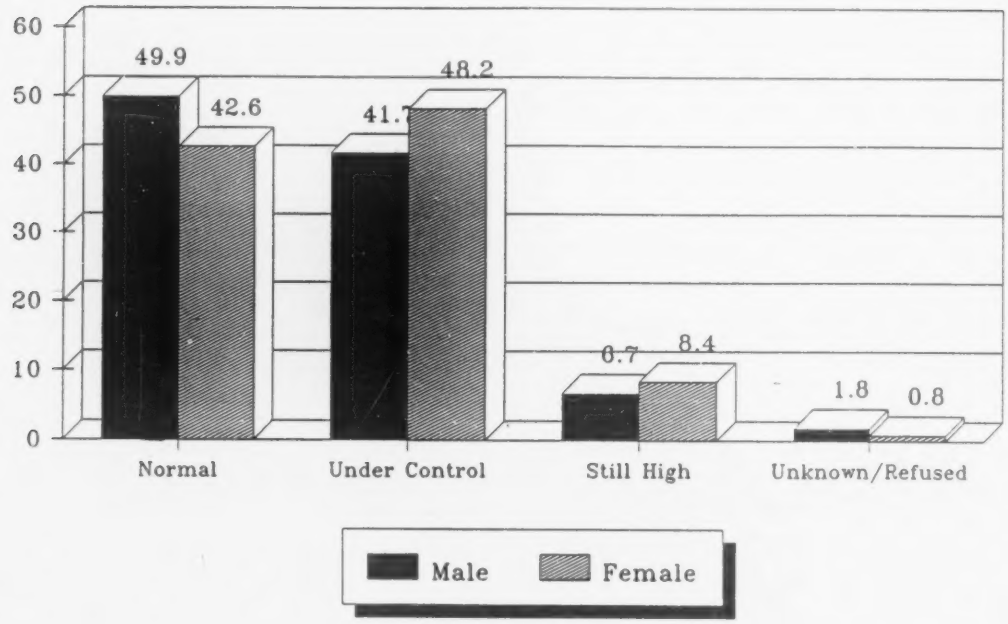
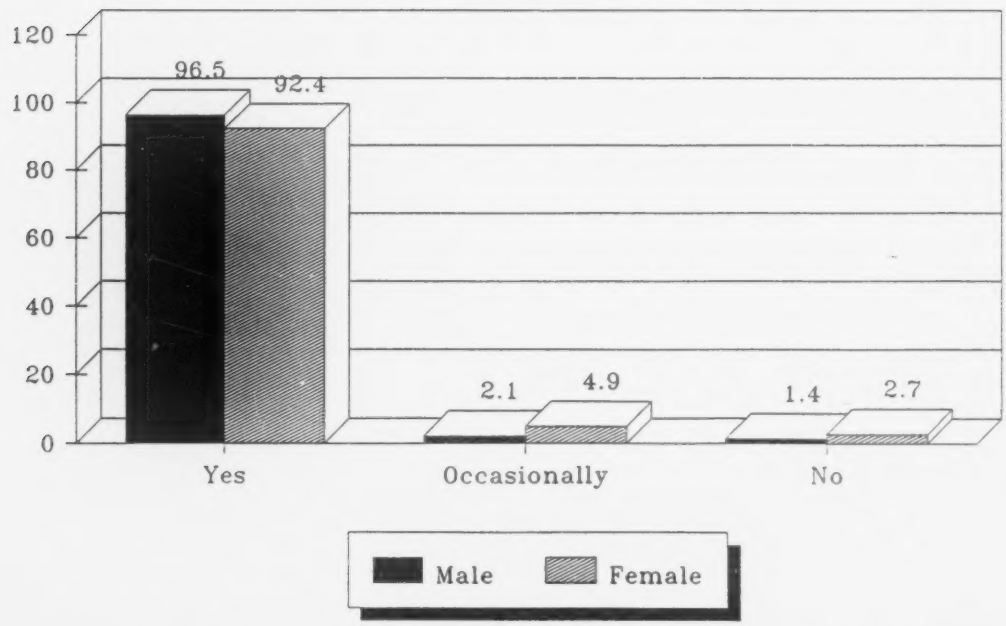


Figure 4

Taking Prescribed Medication By Sex



EXERCISE

Physical activity or exercise is an important component of a healthy lifestyle. According to the 1989 South Dakota Behavioral Risk Factor survey, 54.1% of the adults surveyed reported being "at risk" for a sedentary lifestyle (see Table 4 and Figure 5). "At risk" is defined as those persons who report a sedentary or irregular physical activity level.

Males were at a greater risk for sedentary lifestyle than females (56.7% versus 51.6% respectively). Those respondents in the 18-24 age group were at the least risk for sedentary lifestyle (44.9%) while those in the 65 and over age group were at the highest risk (64.5%).

Respondents with an income level of $20-$25,000 reported a more active lifestyle, with only 45.5% considered at risk for sedentary lifestyle, while those with an income level of $10-$15,000 reported the least amount of physical activity (59.1% considered at risk).

Walking was the most popular reported activity (49.4%) followed by yard work (7.3%), running (5.0%), aerobics class (3.1%), and bicycling (3.0%). See Table 5 for most frequently reported physical activities by sex.

Only 8.6% of the respondents reported exercising sufficiently to meet the 1990 physical fitness objectives established by the U.S. Surgeon General. The specific national objective calls for greater than 60% of adults age 18-64 to participate regularly in vigorous physical exercise by 1990. For persons 65 and older, the national objective is 50%. See Table 6 for physical activity level by sex and age.

Table 4
At Risk for Sedentary Lifestyle
By Selected Demographic Characteristics, 1989

TOTAL	N	% *
	974	54.1%

Sex	N	%
Male	437	56.7%
Female	537	51.6%

Age	N	%
18-24	89	44.9%
25-34	215	50.0%
35-44	174	52.2%
45-54	110	57.5%
55-64	122	56.2%
65 and over	264	64.5%

Race	N	%
White	939	54.8%
Black	2	21.9%
Hispanic	9	44.1%
Other	23	44.4%

Income	N	%
< $10,000	215	58.3%
$10-$15,000	169	59.1%
$15-$20,000	121	52.2%
$20-$25,000	92	45.5%
$25-$35,000	117	49.0%
$35-$50,000	86	52.8%
Over $50,000	58	47.9%
Unknown/Refused	116	65.5%

Marital Status	N	%
Married	574	53.5%
Divorced	100	62.9%
Widowed	137	64.7%
Separated	15	68.5%
Never Married	137	47.6%
Unmarried Couple	10	60.5%
Unknown/Refused	1	30.8%

Education	N	%
<9th grade	122	73.7%
Some high school	102	67.8%
High school grad.	348	55.8%
Some tech. school	31	63.3%
Tech school grad.	37	58.1%
Some college	171	45.4%
College graduate	110	44.2%
Post graduate	51	45.0%

Employment	N	%
Employed	440	51.2%
Self-employed	170	64.2%
Out-of-work >1 year	19	58.7%
Out-of-work <1 year	16	48.2%
Homemaker	54	46.1%
Student	29	37.1%
Retired	246	61.0%

N = Number of respondents in this category.
% - Weighted percentage of respondents in this category.

*This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1987 population estimates from the State Data Center at the University of South Dakota, Vermillion.

Figure 5

Physical Activity Level By Age

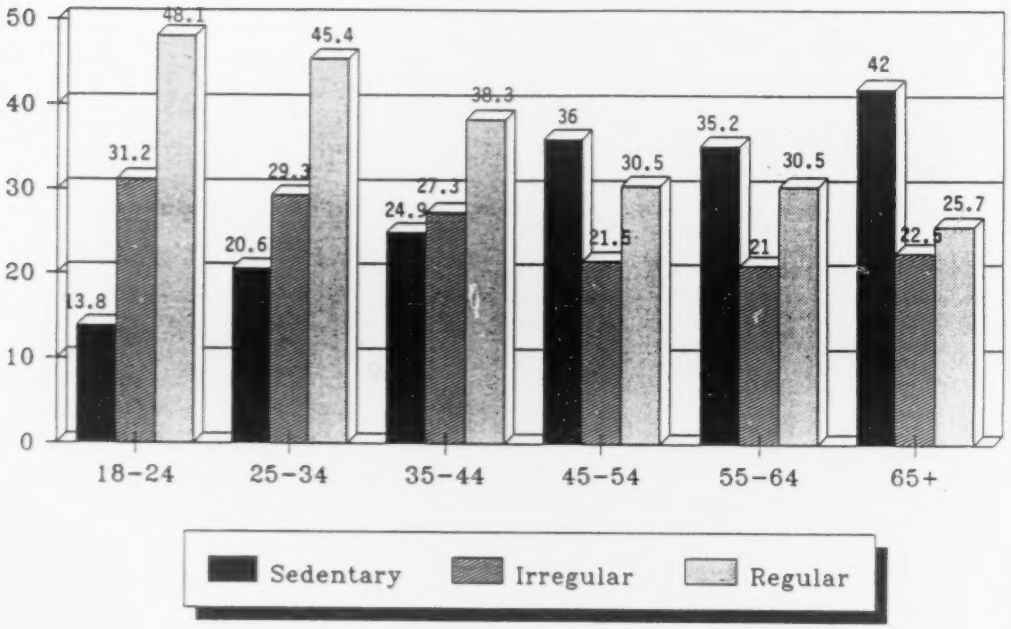


Table 5
Most Frequently Reported Physical Activities By Sex, 1989

	Total	Male	Female
Walking	49.4%	39.2%	58.5%
Yard Work	7.3%	6.4%	8.0%
Running	5.0%	6.8%	3.4%
Aerobics Class	3.1%	0.5%	5.4%
Bicycling	3.0%	3.3%	2.7%
Calisthenics	2.5%	3.5%	1.6%
Swimming	1.7%	0.5%	2.7%
Jogging	1.6%	2.7%	0.5%
Home Exercise	0.8%	0.7%	0.8%
Tennis	0.6%	1.0%	0.3%
All Others	25.0%	35.4%	15.9%

Table 6
Physical Activity Level By Sex and Age, 1989

	Sedentary		Irregular		Regular		1990 Objectives	
	N	%	N	%	N	%	N	%
Sex								
Male	236	30.7%	201	26.0%	277	35.1%	65	8.0%
Female	275	25.7%	262	25.9%	377	39.0%	86	9.1%
Age								
18-24	28	13.8%	61	31.2%	100	48.1%	13	7.0%
25-34	88	20.6%	127	29.3%	198	45.4%	20	4.4%
35-44	85	24.9%	89	27.3%	131	38.3%	32	9.5%
45-54	66	36.0%	44	21.5%	59	30.5%	20	10.8%
55-64	74	35.2%	48	21.0%	65	30.4%	31	13.4%
65+	170	42.0%	94	22.5%	101	25.7%	35	9.5%

Sedentary - Persons who reported either no physical activity or physical activity less than three times per week for less than 20 minutes each time, excluding job-related activity.

Irregular - Persons who performed a physical activity less than 20 minutes each time or less than three times a week.

Regular - Persons who exercised at least three times per week for 20 minutes or more each time.

1990 Objective - Persons who exercise regularly and vigorously in an activity using the heart and lungs at 60% capacity or greater, according to a standard scaled by age. This objective is used to measure the nation's progress toward meeting national health objectives in the year 1990.

WEIGHT CONTROL PRACTICES

The Centers for Disease Control defines overweight as being 120% or more above "ideal weight" according to the 1959 Metropolitan Life Insurance height-weight tables. All respondents were compared to the recommended weight for a medium frame individual of their reported height. Based on these calculations, an estimated 25.4% of South Dakota's adult population are "at risk" for being overweight with a higher percentage of males than females considered "at risk" (27.5% vs. 23.5%) (see Table 7). Figure 6 shows the weight distribution of the survey population.

In general, as age increased in the survey group, so did weight. The exception occurred in the 55-64 year old age group and those age 65 and older. In terms of marital status, those respondents who were widowed were at greater risk for being overweight (34.4%). When looking at income levels, those respondents with a reported income of $10-$15,000 were at greatest risk for being overweight (30.8%) while those with a reported annual income of $20-$25,000 were at least risk (21.5%).

Respondents were also asked if they were currently on a diet to try to lose weight. Thirty eight percent of the female respondents reported trying to lose weight compared to only 21.9% of males (Figure 7 shows the distribution of dieting by sex and age). Of those trying to lose weight, 65.9% were eating fewer calories, 54.6% reported increasing their physical activity level, and 5.8% were participating in an organized weight program (see Figure 8).

Table 7
At Risk for Being Overweight (Based on Percent of Median)
By Selected Demographic Characteristics, 1989

TOTAL	N	% *
	462	25.4%

Sex	N	%
Male	219	27.5%
Female	243	23.5%

Age	N	%
18-24	22	11.3%
25-34	85	21.0%
35-44	84	24.2%
45-54	66	34.7%
55-64	73	33.1%
65 and over	132	32.3%

Race	N	%
White	435	25.2%
Black	3	22.6%
Hispanic	5	21.3%
Other	19	39.0%

Income	N	%
< $10,000	107	27.3%
$10-$15,000	83	30.8%
$15-$20,000	49	22.0%
$20-$25,000	45	21.5%
$25-$35,000	65	26.3%
$35-$50,000	47	26.9%
Over $50,000	30	25.8%
Unknown/Refused	36	20.5%

Marital Status	N	%
Married	295	27.3%
Divorced	40	25.8%
Widowed	73	34.4%
Separated	5	29.7%
Never Married	46	14.5%
Unmarried Couple	3	15.0%
Unknown/Refused	-	-

Education	N	%
<9th grade	65	38.6%
Some high school	48	30.6%
High school grad.	146	23.1%
Some tech. school	14	29.0%
Tech school grad.	12	19.8%
Some college	100	27.3%
College graduate	55	23.0%
Post graduate	22	15.6%

Employment	N	%
Employed	184	21.2%
Self-employed	83	31.0%
Out-of-work >1 year	14	50.1%
Out-of-work <1 year	11	28.0%
Homemaker	30	26.1%
Student	10	11.4%
Retired	130	33.0%

N = Number of respondents in this category.
% - Weighted percentage of respondents in this category.

*This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1987 population estimates from the State Data Center at the University of South Dakota, Vermillion.

Figure 6

Distribution of Weight Categories

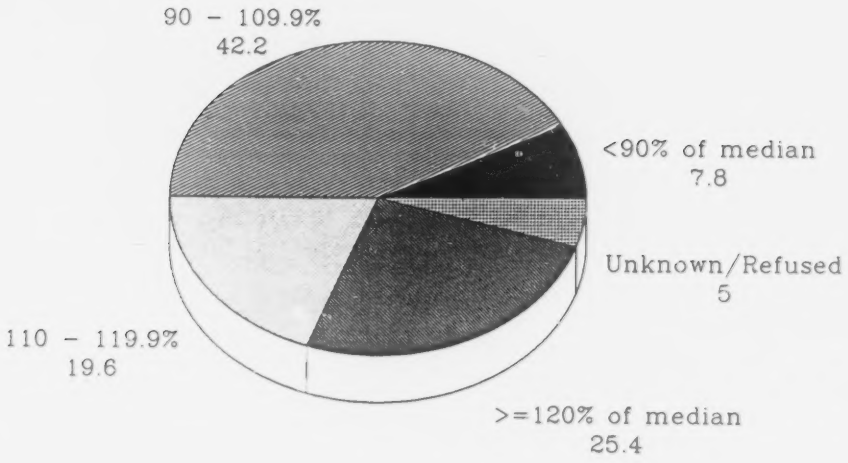


Figure 7

Percent of South Dakotans Now Trying To Lose Weight By Sex and Age

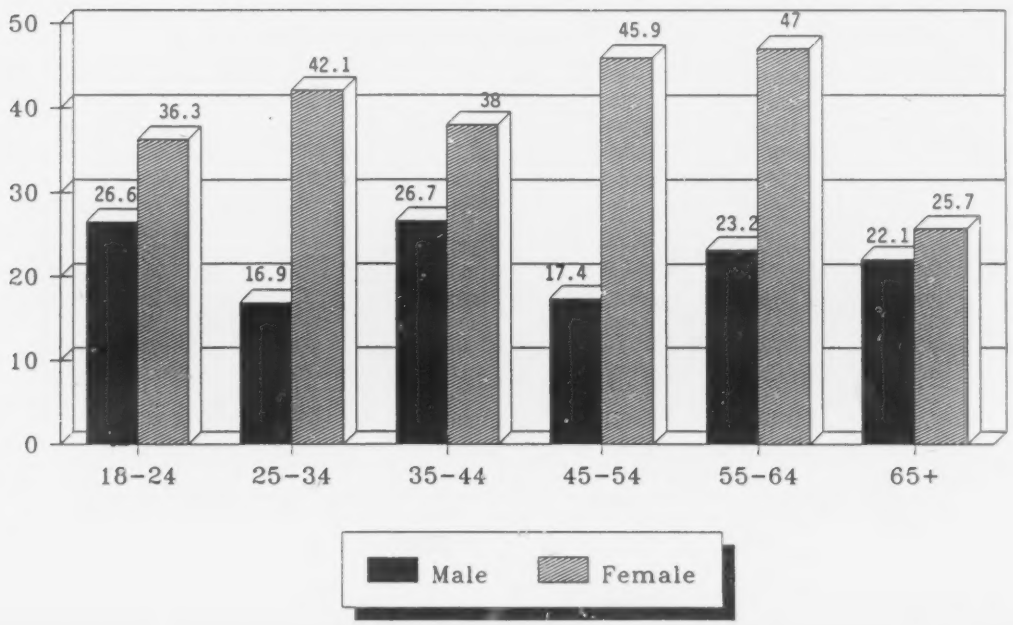
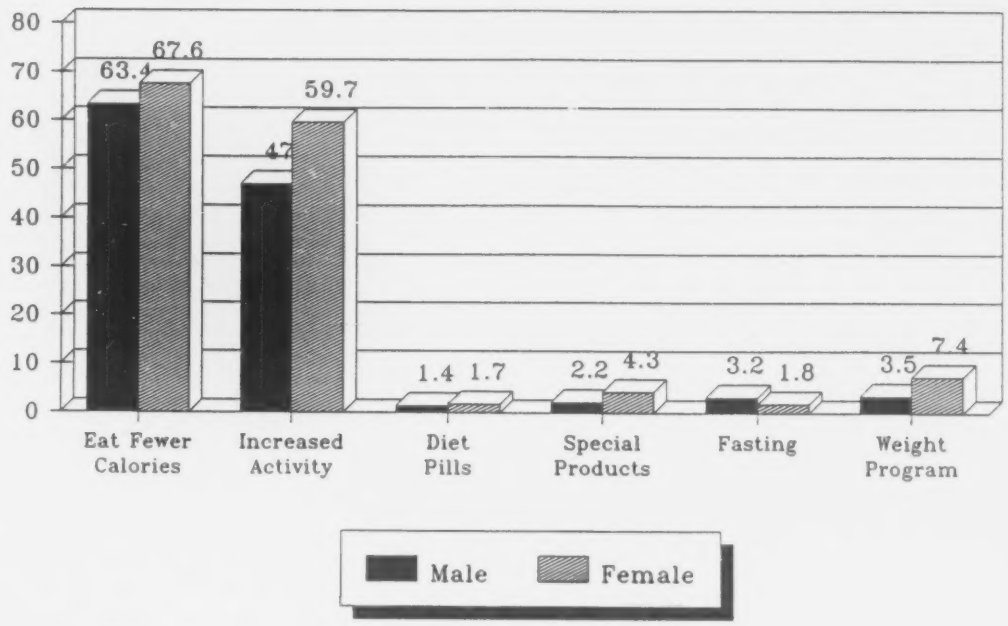


Figure 8

Method of Attempted Weight Reduction By Sex



CIGARETTE SMOKING

In South Dakota 21.8% of the adult population reports being "at risk" for cigarette smoking. Table 8 shows the survey population of smokers according to selected demographic characteristics. For the purposes of the Behavioral Risk Factor survey, cigarette smoking is defined as those persons who have smoked at least 100 cigarettes in their lives and currently smoke on a regular basis.

Reviewing the characteristics of reported smokers in the survey, 23.6% were male and 20.0% were female. By specific age groups, the reported prevalence of smoking was highest among 45-54 year olds followed by 35-44 year olds (33.9% and 27.0% respectively). Among income groups, the highest proportion (28.6%) at risk for smoking reported an annual income of $10-$15,000.

Attempts to quit smoking were reported by 35.2% of smokers. This group is defined as those who stopped smoking for one week or more some time during the past year. Both current smokers and persons who have never smoked regularly are included in this figure. Attempts to quit smoking were higher among those 18 to 24 years of age and slightly higher for females.

Regarding smoking status, current as well as former smokers tended to be male. By age, the highest proportion of current smokers occurred in the 45-54 year old age group, with the largest proportion of former smokers being over age 65. Females rated higher than males in the category of "never smoked" at 64.3% versus 47.6%. The data concerning smoking status is shown in Figures 9 and 10.

Table 8
At Risk for Cigarette Smoking
By Selected Demographic Characteristics, 1989

TOTAL	N	% *
	397	21.8%

Sex	N	%
Male	194	23.6%
Female	203	20.0%

Age	N	%
18-24	34	16.0%
25-34	110	24.2%
35-44	92	27.0%
45-54	67	33.9%
55-64	52	22.4%
65 and over	42	10.8%

Race	N	%
White	373	21.5%
Black	-	-
Hispanic	4	18.4%
Other	19	36.4%

Income	N	%
< $10,000	73	19.4%
$10-$15,000	80	28.6%
$15-$20,000	54	23.0%
$20-$25,000	54	24.5%
$25-$35,000	61	23.4%
$35-$50,000	27	15.9%
Over $50,000	20	16.9%
Unknown/Refused	28	17.5%

Marital Status	N	%
Married	242	22.1%
Divorced	73	45.3%
Widowed	21	10.3%
Separated	11	53.2%
Never Married	41	13.5%
Unmarried Couple	8	45.5%
Unknown/Refused	1	69.2%

Education	N	%
<9th grade	30	18.6%
Some high school	35	22.4%
High school grad.	170	26.9%
Some tech. school	19	37.2%
Tech school grad.	13	22.9%
Some college	85	21.4%
College graduate	26	9.7%
Post graduate	18	15.1%

Employment	N	%
Employed	223	25.1%
Self-employed	58	19.8%
Out-of-work >1 year	13	43.4%
Out-of-work <1 year	13	38.9%
Homemaker	23	18.7%
Student	10	8.9%
Retired	56	15.8%

N = Number of respondents in this category.
% - Weighted percentage of respondents in this category.

*This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1987 population estimates from the State Data Center at the University of South Dakota,. Vermillion.

Figure 9

Smoking Status By Sex

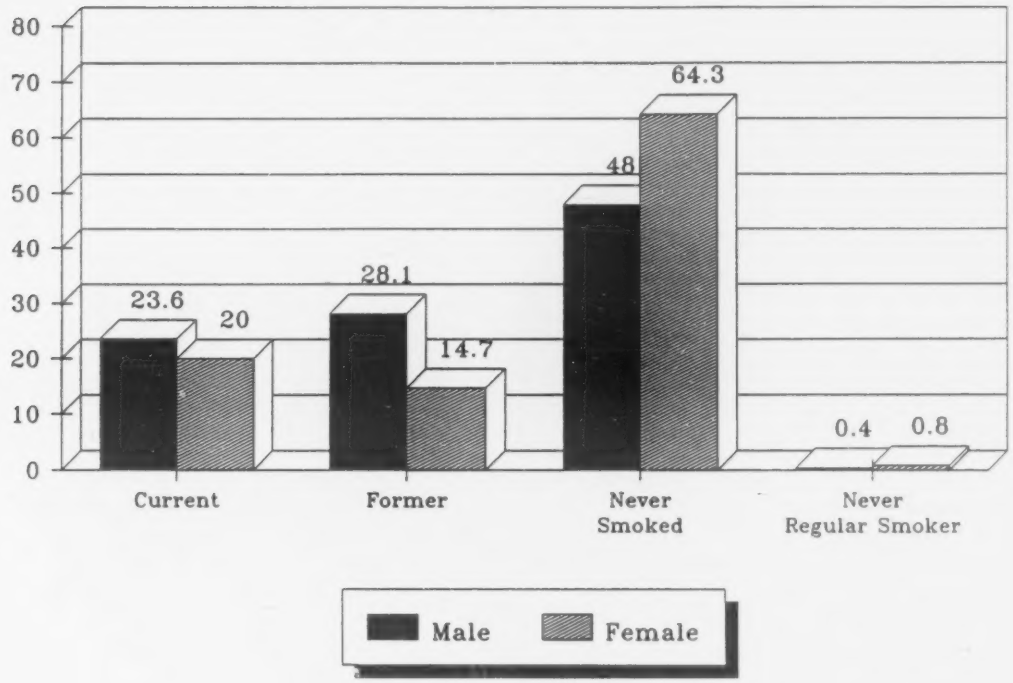
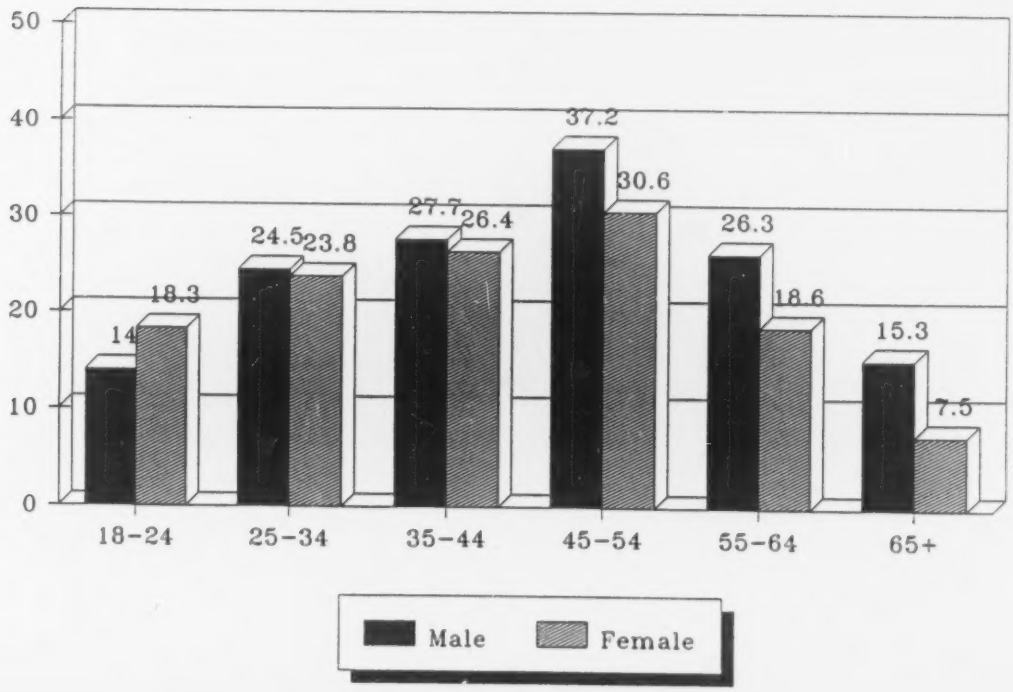


Figure 10

Current Smokers By Sex and Age



ALCOHOL USE

Acute Drinking

Acute drinking is defined as consuming five or more alcoholic drinks on an occasion at least once during the past month. In South Dakota an estimated 17.8% of the state's population are acute drinkers. See Table 9 for a summary of the survey population at risk for acute drinking.

Males were at a much greater risk than females, 25.6% versus 10.3%. Those in the 18-24 year age group reported a much higher frequency of acute drinking at 36.1%.

Chronic Drinking

According to the 1989 Behavioral Risk Factor survey self-reported data, an estimated 2.8% of South Dakota's adult population is considered to be chronic drinkers. A chronic drinker is defined as an individual who reports an average of 60 or more alcoholic drinks a month. Males in the 18-24 age group are considered to be most at risk. See Table 10 for a more detailed description of those at risk.

Drinking and Driving

Based on self-reported data, an estimated 4.9% of the state's adult population are at risk for drinking and driving. Those respondents considered to be at risk for drinking and driving are those who reported drinking and driving on one or more occasions during the past month. Table 11 shows those groups considered to be at greatest risk.

Risk by age for acute drinking, chronic drinking, and drinking and driving is shown in Figure 11.

Table 9
At Risk for Acute Drinking
By Selected Demographic Characteristics, 1989

TOTAL	N	% *
	303	17.8%

Sex	N	%
Male	202	25.6%
Female	101	10.3%

Age	N	%
18-24	72	36.1%
25-34	115	26.2%
35-44	65	17.6%
45-54	23	13.0%
55-64	19	8.9%
65 and over	9	2.1%

Race	N	%
White	291	18.0%
Black	2	13.9%
Hispanic	4	18.7%
Other	6	11.6%

Income	N	%
< $10,000	52	17.6%
$10-$15,000	41	15.4%
$15-$20,000	51	22.8%
$20-$25,000	40	18.6%
$25-$35,000	51	18.6%
$35-$50,000	30	17.6%
Over $50,000	27	23.7%
Unknown/Refused	11	8.8%

Marital Status	N	%
Married	166	15.0%
Divorced	36	23.3%
Widowed	7	3.6%
Separated	4	20.2%
Never Married	85	32.7%
Unmarried Couple	5	31.4%
Unknown/Refused	-	-

Education	N	%
<9th grade	10	7.3%
Some high school	12	9.2%
High school grad.	118	17.9%
Some tech. school	12	26.7%
Tech school grad.	13	20.9%
Some college	74	21.7%
College graduate	44	20.5%
Post graduate	20	17.8%

Employment	N	%
Employed	180	21.4%
Self-employed	59	21.7%
Out-of-work >1 year	8	30.7%
Out-of-work <1 year	12	32.2%
Homemaker	8	5.8%
Student	24	30.5%
Retired	12	3.3%

N = Number of respondents in this category.
% - Weighted percentage of respondents in this category.

*This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1987 population estimates from the State Data Center at the University of South Dakota, Vermillion.

Table 10
At Risk for Chronic Drinking By Sex and Age, 1989

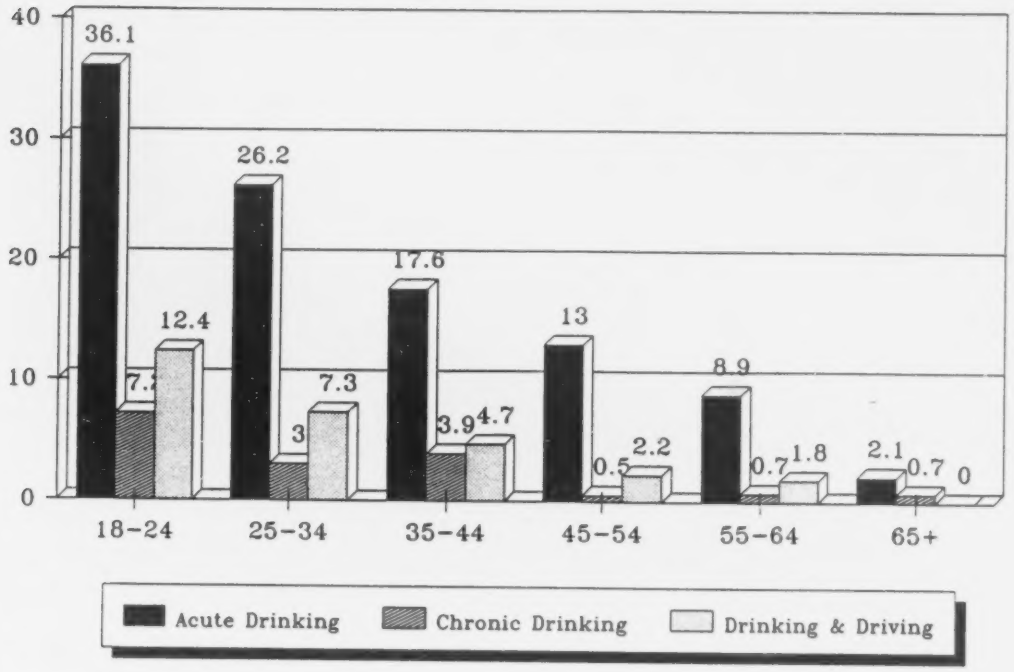
	At Risk		Not At Risk	
	N	%	N	%
Sex				
Male	41	5.1%	740	94.9%
Female	7	0.6%	995	99.3%
Age				
18-24	14	7.2%	188	92.8%
25-34	13	3.0%	420	96.7%
35-44	15	3.9%	322	96.1%
45-54	1	0.5%	190	99.5%
55-64	2	0.7%	216	99.3%
65+	3	0.7%	399	99.3%
TOTAL	48	2.8%	1,735	97.2%

Table 11
At Risk for Drinking and Driving By Sex and Age, 1989

	At Risk		Not At Risk		Unknown	
	N	%	N	%	N	%
Sex						
Male	63	8.1%	716	91.6%	2	0.2%
Female	19	1.9%	982	98.0%	2	0.2%
Age						
18-24	25	12.4%	177	87.6%	-	-
25-34	32	7.3%	402	92.7%	-	-
35-44	17	4.7%	317	94.5%	3	0.8%
45-54	4	2.2%	187	97.8%	-	-
55-64	4	1.8%	213	97.6%	1	0.5%
65+	-	-	402	100.0%	-	-
TOTAL	82	4.9%	1,698	94.9%	4	0.2%

Figure 11

At Risk for Alcohol Use By Age



Routine Checkup

Nearly 62% of the survey population reported having had a routine checkup within the past year. Over 71% of the female survey respondents reported having a routine checkup within the past year compared to only 51.1% for males (see Figure 12). Figure 13 shows the type of doctor the respondents saw for their last routine checkup.

Figure 12

How Long Since Last Routine Checkup

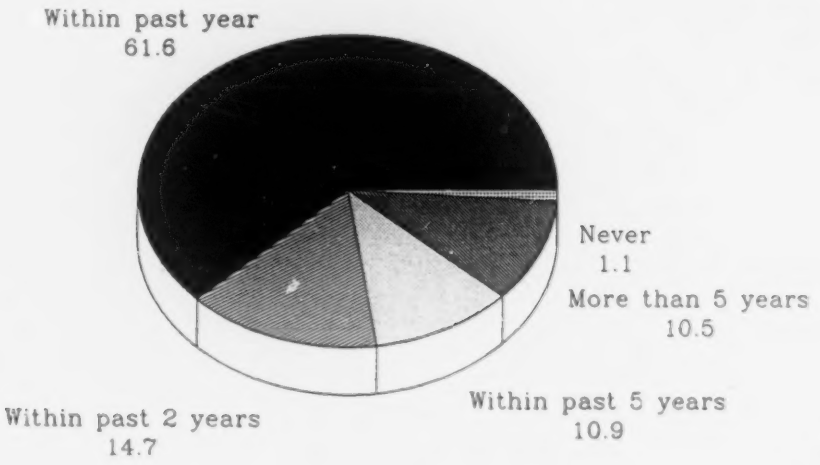
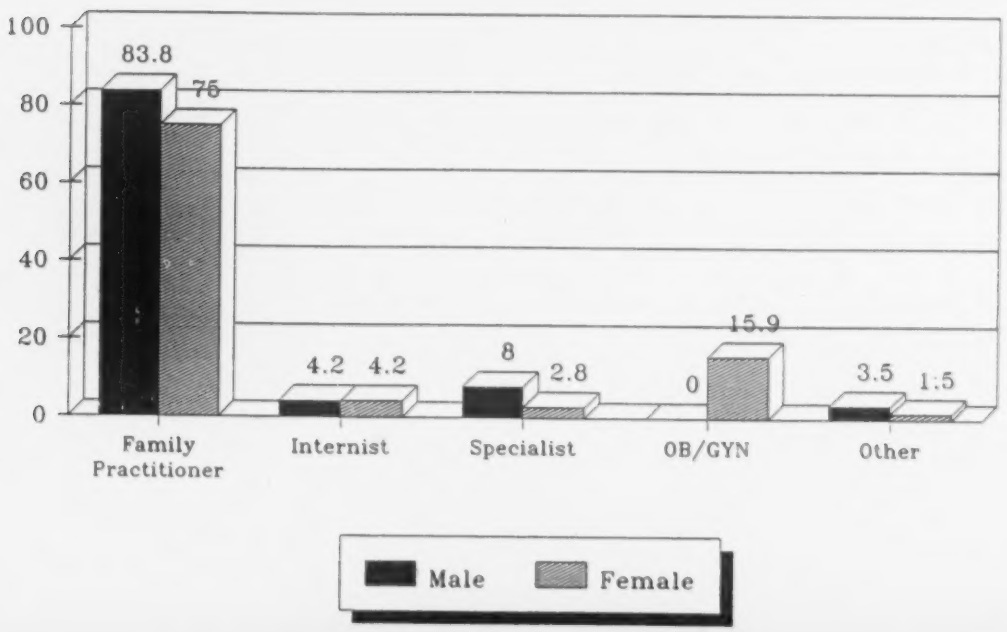


Figure 13

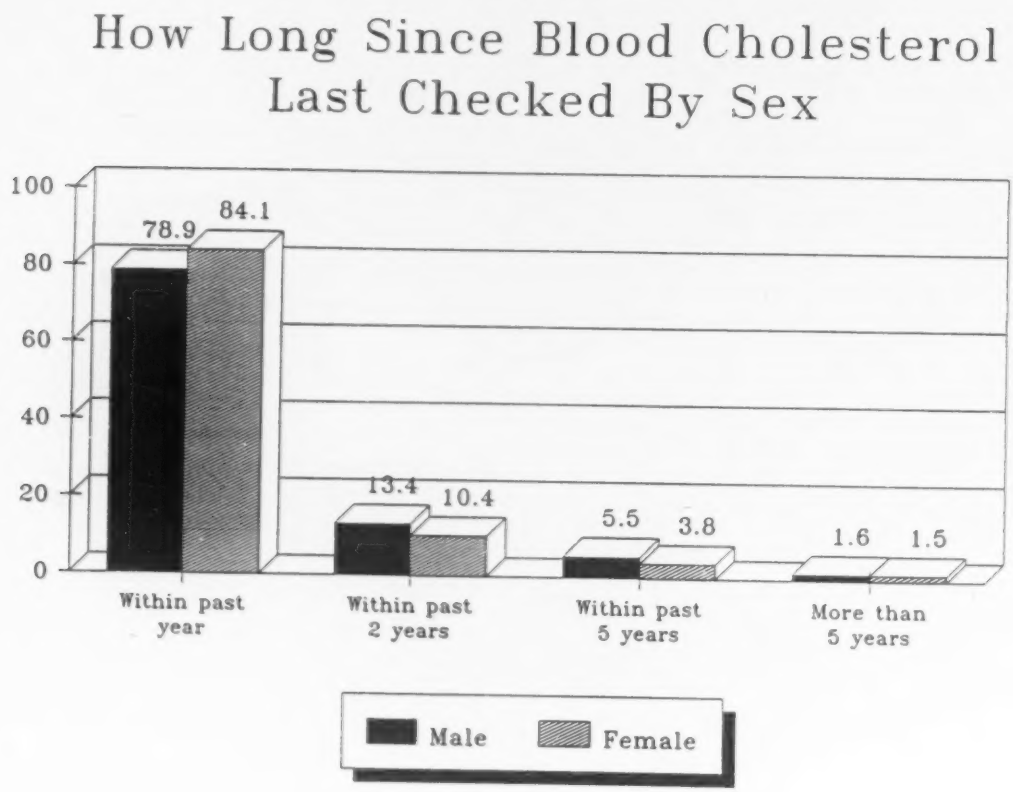
Type of Doctor Seen for Last Routine Checkup By Sex



Cholesterol

Nearly 53.% of adult South Dakotans reported ever having their cholesterol level checked with 81.8% of those reporting having it checked within the past year (see Figure 14). Of the 24.5% of the survey respondents who have ever been told their blood cholesterol is high, 15.4% were under a doctor's advice to reduce their cholesterol.

Figure 14



Mammography

Only 40.6% of the female populations reported ever having a mammogram. Those women age 55-64 reported the highest percentage of women having mammograms with 67.4%. Of those women who have had a mammogram, 62.3% had had one within the past year (see Figure 15). Most mammograms were part of a routine examination (see Figure 16).

When asked the most important reason for not having a mammogram in the last year, female respondents cited it was not needed (39.1%) or it was not recommended (26.3%) while only 3.7% mentioned cost (see Figure 17).

Table 12 shows the percent of women having ever had a mammogram by income while time since last mammogram by income is shown in Table 13.

Figure 15

How Long Since Last Mammogram

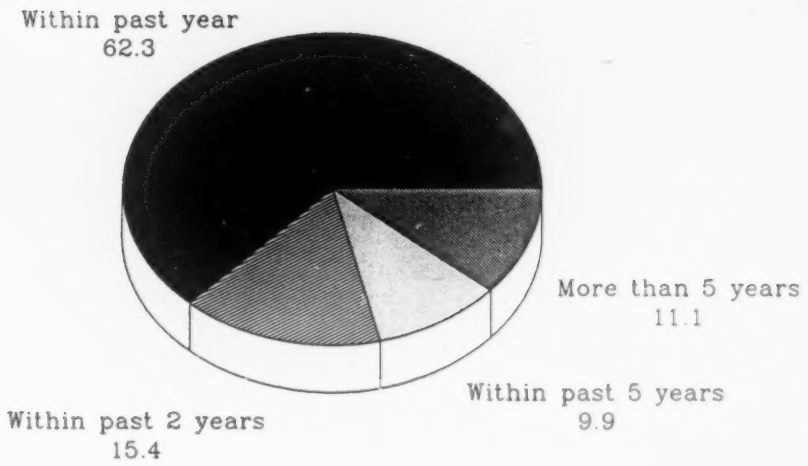


Figure 16

Reason for Last Mammogram

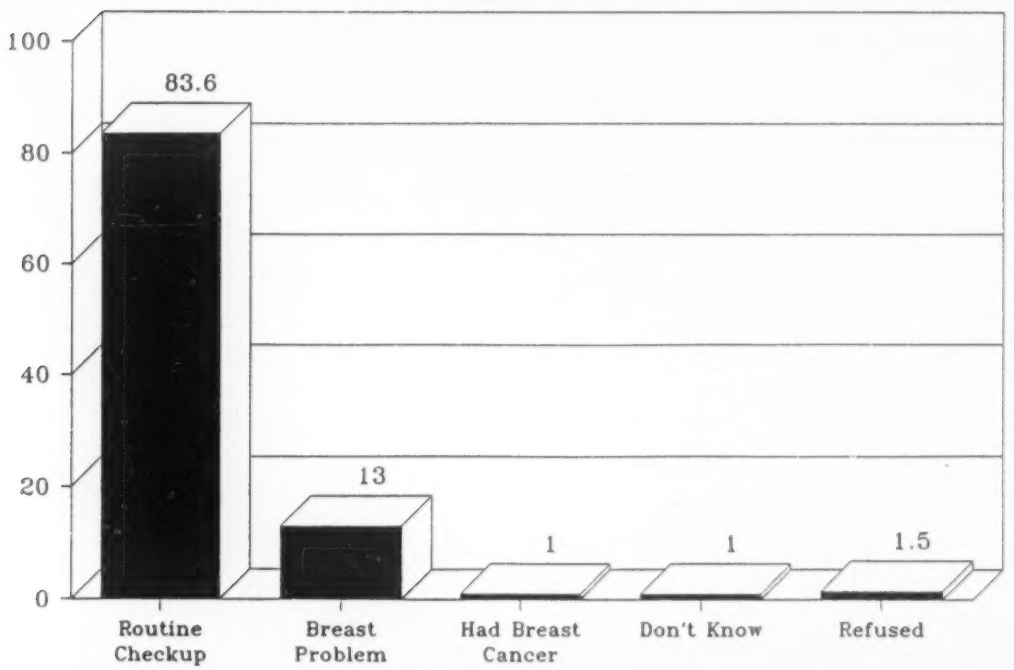


Figure 17

Most Important Reason for Not Having a Mammogram in the Last Year

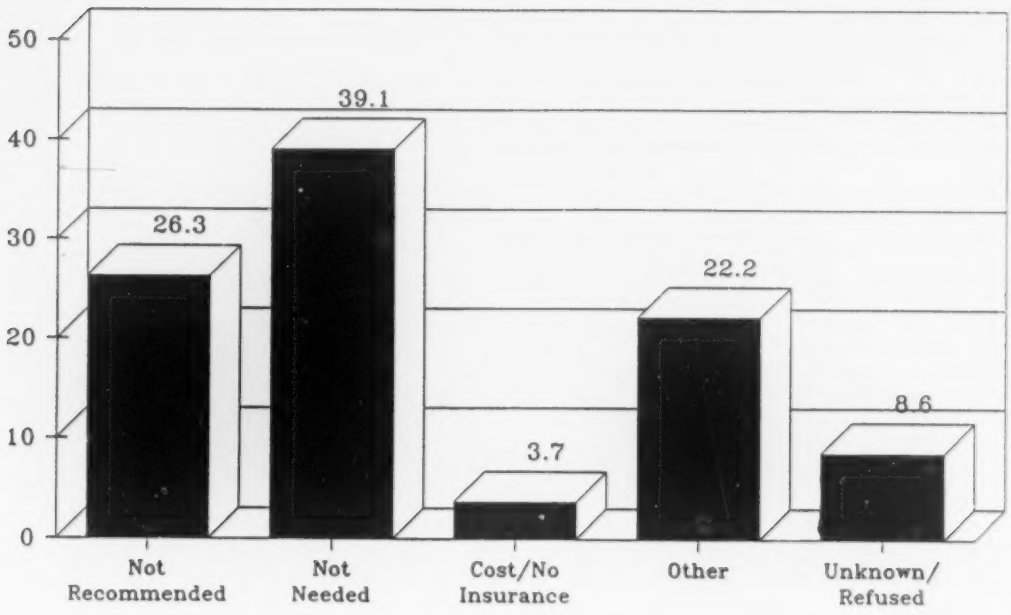


Table 12
Percent of South Dakota Women Having Ever Had A Mammogram
By Income, 1989

	Yes		No		Unknown/ Refused	
	N	%	N	%	N	%
Under $10,000	104	40.6%	137	58.8%	2	0.6%
$10-$15,000	64	36.7%	107	63.3%	-	-
$15-$20,000	40	35.1%	78	64.9%	-	-
$20-$25,000	40	39.6%	66	60.4%	-	-
$25-$35,000	50	42.5%	65	56.6%	1	0.8%
$35-$50,000	34	41.3%	49	58.7%	-	-
Over $50,000	23	44.3%	63	46.8%	-	-
Unknown/Refused	54	53.2%	24	54.2%	2	1.4%

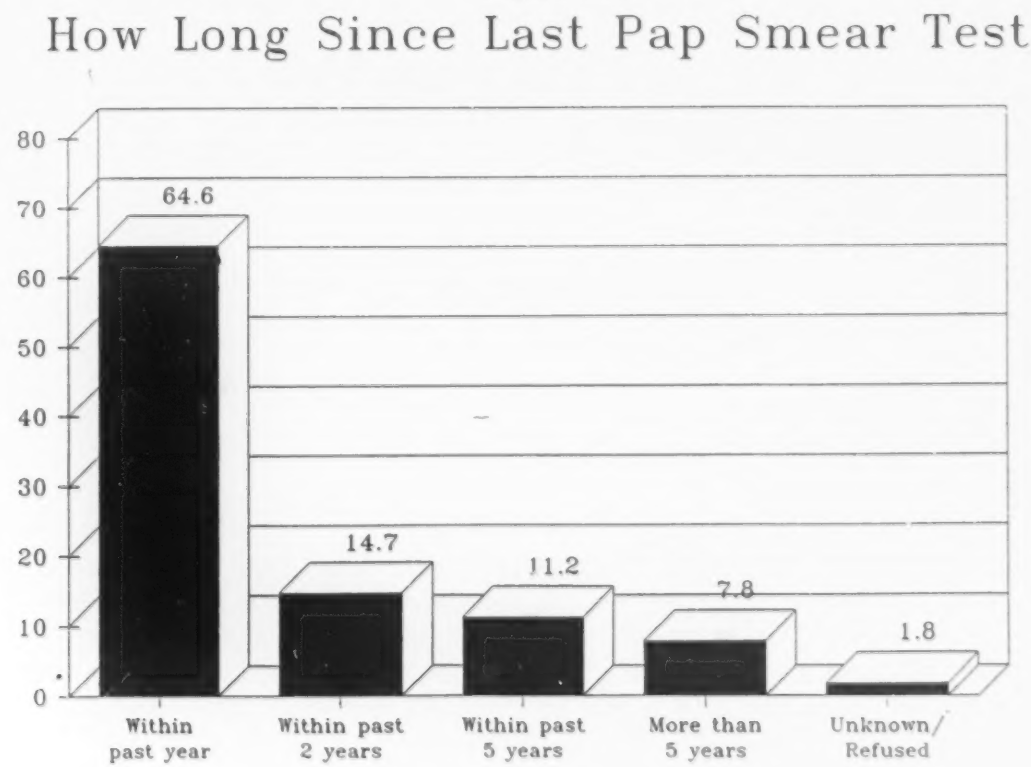
Table 13
How Long Since Last Mammogram By Income, 1989

	Within Past Year		Within Past 2 Years		Within Past 5 Years		More Than 5 Years	
	N	%	N	%	N	%	N	%
Under $10,000	58	57.0%	17	13.3%	9	9.9%	17	17.6%
$10-$15,000	39	61.2%	8	9.5%	7	11.5%	9	16.9%
$15-$20,000	20	45.7%	6	20.3%	8	17.0%	6	17.0%
$20-$25,000	30	74.4%	5	11.4%	4	12.3%	1	1.9%
$25-$35,000	30	60.7%	12	25.2%	4	7.1%	4	7.0%
$35-$50,000	24	71.8%	6	17.9%	1	2.8%	1	4.3%
Over $50,000	18	78.2%	3	14.0%	2	7.8%	-	-
Unknown/Refused	35	60.9%	6	13.7%	5	9.6%	6	12.6%

Pap Smear Tests

While over 94% of the female survey respondents reported ever having a pap smear test, only 64.6% had had one within the past year (see Figure 18).

Figure 18



CONCLUSION

Estimates from the 1989 South Dakota Behavioral Risk Factor Survey indicate that a large portion of the adult population is considered "at risk" for various risk factor categories. Table 14 shows the percentage and estimated number of adult South Dakotans at risk by specific risk factor based on 1987 population figures.

Table 14
Percentage and Estimated Number of South Dakotans At Risk
By Specific Risk Factors, 1989

	Percentage At Risk	Estimated Number At Risk
Lack of Seat Belt Use	61.9%	318,952
Sedentary Lifestyle	54.1%	278,761
Overweight	25.4%	130,878
Cigarette Smoking	21.8%	112,329
Acute Drinking	17.8%	91,718
Hypertension	15.6%	80,382
Drinking and Driving	4.9%	25,248
Chronic Drinking	2.8%	14,428

Risk prevalence surveillance information such as the BRFSS when used in conjunction with state vital records and other health planning data can be very useful for strategic health planning. The BRFSS data are used by the Department of Health and other health agencies throughout the state to identify those individuals who are considered "at risk" for adverse health outcomes due to their lifestyles and behaviors. Once high risk groups are identified the Department can then target health education and promotion programs specifically designed to meet the unique needs and characteristics of those individual groups.

APPENDIX A

TECHNICAL NOTES

Participating Agencies

This survey was a combined effort of the South Dakota Department of Health and the Centers for Disease Control. The Department collected the data, supervised the survey, provided the telephones, office space, interviewers, and supplies. CDC provided financial and technical assistance, developed the questionnaire, designed the methodology, and processed the data.

Method of Surveillance

A telephone survey was considered more appropriate for this study than other survey methods because of its low cost, ease of administration, ease of reaching respondents, and reliability.

It is important to remember this survey is based on self-reported data. Consequently people may tend to report a more favorable lifestyle than actually practiced. The accuracy of self-reported data also may vary according to risk factors, i.e., self-reported smoking status is thought to be more accurate than self-reported seat belt use. These limitations do not negate the survey's ability to identify high risk groups and monitor long-term trends. Extensive field testing and recent advances in collecting, processing, and analyzing self-reported information have improved the quality of such data.

Instrument Development

The core survey questionnaire (see Appendix B) was developed by the Centers for Disease Control, drawing mainly from their list of common data items used by risk factor researchers. Standard demographic questions are included along with sections on seat belt use, hypertension, exercise, weight control practices, tobacco use, alcohol use, and preventive health practices. The introduction, wording of the questions and transitional phrasing between questions resulted from extensive field testing by CDC. State specific questions were also added to the core questionnaire.

Eligible Respondent Selection

Eligible respondents for the survey were defined as individuals 18 years of age and older who reside a majority of the time at the household contacted. In households with more than one eligible respondent, a random selection was made to determine the actual respondent. If the number dialed was a business phone or a non-working number, or for some other reason the selected respondent was not able to respond to the survey, another randomly selected number was used. "No answers" and busy signals were redialed a minimum of four times on five different days and at at different times before being replaced.

Data Collection Process

All 1,784 interviews were completed between January through December of 1989. All data were collected by paper and pencil. One supervisor and six interviewers were used to collect data in 1989. Missouri Shores Women's Resource Center in Pierre, South Dakota served as the contract agency for the Department of Health to provide the survey staff for the survey.

Quality Control

The quality of survey data is only as good as the methods followed to collect it. CDC has developed quality control standards for the BRFSS to monitor the quality of each state's survey data. For 1989, South Dakota exceeded all CDC quality control standards (see Table 15).

Table 15
South Dakota Quality Control Measures, 1989

	South Dakota	CDC Standard
CASRO	84%	≥75%
Procedural Response Rate	88%	≥85%
Upper Bound Response Rate	94%	≥90%
Survey Efficiency Rate	52%	≥40%
No Answer	6%	≤10%
% Sample in Refusals	3%	≤10%
Non Response Rate	16%	≤25%

Response rates measure the extent to which interviewers were able to reach eligible respondents. The higher the rate, the more successful they were in reaching eligible respondents and the lower the potential will be for individual bias in the data. No definitive formula for response rate calculation exists. Upper bound represents the most liberal measure while CASRO is more conservative. Procedural is an indicator of how well recommended survey procedures were followed.

Data Processing

Pre-coded paper and pencil questionnaires were keypunched and transferred to a diskette by Department of Health staff. The computer disk was then sent to CDC for processing. Tables showing the frequencies and percentages for all questions be demographic categories were returned to the South Dakota Department of Health.

Weighting

Collecting data via a telephone survey often produces an overrepresentation of certain groups in the sample population. The sample population, therefore, may not be a true representation of the actual population. In order to correct this inherent problem, a procedure referred to as weighting was applied to the data.

The results presented here are weighted to take into account the age, race, and gender distribution of adult South Dakotans. In addition, the respondents' probability of selection (determined by the number of telephone numbers and the number of adults in each household) is also weighted. As a result of these weighting factors, the data presented are generally representative of South Dakota's adult population by age, race and gender.

Sample Description

Demographic variables including age, gender, and race were collected. The results are summarized in Table 16 and contrasted to 1987 population estimates. Subsequent data, which depict these survey respondents' demographics, have been weighted to represent the 1987 population.

Tables 17, 18, 19, and 20 summarize the household income, marital status, level of education and employment status of the survey population of the 1989 South Dakota Behavioral Risk Factor Survey. Since the data were not weighted for these factors, they are not compared to the 1987 population estimates.

Table 16
Demographic Summary of Survey Population, 1989

Demographic Characteristics	Respondents		1987 Pop. Estimates	
	N	%	N	%
AGE				
18-24	202	15.2%	78,007	15.2%
25-34	434	23.6%	121,832	23.6%
35-44	337	17.3%	89,036	17.3%
45-54	191	12.1%	62,317	12.1%
55-64	218	12.4%	62,813	12.2%
Over 65	402	19.4%	100,194	19.4%
TOTAL	1,784	100.0%	515,269	100.0%
SEX				
Male	781	43.8%	251,222	48.8%
Female	1,003	56.2%	264,047	51.2%
TOTAL	1,784	100.0%	515,269	100.0%
RACE				
White	1,697	95.1%	486,097	94.3%
Non White	87	4.9%	29,172	5.7%
TOTAL	1,784	100.0%	515,269	100.0%

Source: South Dakota State Data Center, 1987 population estimates.

Table 17
Household Income of Survey Population, 1989

Under $10,000	359	17.3%
$10-$15,000	281	15.1%
$15-$20,000	228	13.0%
$20-$25,000	207	12.6%
$25-$35,000	251	14.9%
$25-$50,000	167	10.2%
Over $50,000	119	6.9%
Refused	172	10.0%
	1,784	100.0%

Table 18
Marital Status of Survey Population, 1989

Married	1,084	67.7%
Divorced	167	6.1%
Widowed	212	7.5%
Separated	20	0.8%
Never Married	282	16.7%
Unmarried Couple	17	1.1%
Unknown/Refused	2	0.1%
	1,784	100.0%

Table 19
Level of Education of Survey Population, 1989

<9th grade	167	8.5%
Some high school	145	8.2%
High school grad.	610	35.3%
Some tech. school	51	2.9%
Tech school grad.	64	3.7%
Some college	378	21.4%
College graduate	245	13.3%
Post graduate	119	6.4%
Unknown/Refused	5	0.3%
	1,784	100.0%

Table 20
Employment Status of Survey Population, 1989

Employed	857	49.1%
Self-Employed	275	16.3%
Out-of-work >1 year	29	1.6%
Out-of-work <1 year	36	1.9%
Homemaker	118	7.0%
Student	78	5.3%
Retired	390	18.7%
Unknown/Refused	1	0.1%
	1,784	100.0%

APPENDIX B

1989 Behavioral Risk Factor Questionnnaire

FIPS STATE CODE	STRATUM CODE	PSU NUMBER	RECORD NUMBER	DATE OF INTERVIEW MM DD YY	ID
46	1				
(1-2)	(3)	(4-8)	(9)	(10-15)	(16-17)

HELLO. I'm _____ calling for the South Dakota Department of Health. We're doing a study of the health practices of South Dakota residents. Your number has been chosen randomly by the Health Department to be included in the study, and we'd like to ask some questions about things people do which may affect their health.

Is this Area Code 605 (18-20) Prefix (21-23) Suffix (24-25) ____ ____

No → *Thank you very much, but I seem to have dialed the wrong number. It's possible that your number may be called at a later time.* STOP

Is this a private residence?

No → *Thank you very much, but we are only interviewing in private residences.* STOP

	Date	Time	Time	Time	Time	ID	Comments
⊘ Line busy							
● No answer							

Appointments:

	Today's date/time	Spoke with	Ask for	Call-back date & time	ID	Comments
1.						
2.						

Refusals:

	Date/time	Spoke with	ID	Comments
1st:				
2nd:				

Call Disposition Codes

01 - Completed interview.
02 - Refused interview.
03 - Non-working number.
04 - No answer (multiple times).
05 - Business phone.
06 - No eligible respondent at this number.
07 - No eligible respondent could be reached during time period.
08 - Language barrier prevented completion of interview.
09 - Interview terminated within questionnaire.
10 - Line busy (multiple tries).
11 - Selected respondent unable to respond because of physical or mental impairment.

Edited by: _____

Date: __/__/__

Final Disposition of Telephone Call: ____ (26-27)

Our study requires that we interview only one person who lives in your household. How many members of your household, including yourself, are 18 years of age or older? ____ (28)

If "1" → Page 3

How many are men and how many are women? Men ____ (29) Women ____ (30)

Who is the oldest man who presently lives in this household?
Who is the next oldest man who presently lives in this household?
Etc.

Who is the oldest woman who presently lives in this household?
Who is the next oldest woman who presently lives in this household?
Etc.

Suffix: ____ ____ ____ ____

Name or Relationship	Last digit of phone number: 0	1	2	3	4	5	6	7	8	9	
1. _____	1	1	1	1	1	1	1	1	1	1	1.
2. _____	2	1	2	1	2	1	2	1	2	1	2.
3. _____	3	1	2	3	1	2	3	1	2	X	3.
4. _____	1	2	3	4	1	2	3	4	X	X	4.
5. _____	2	3	4	5	1	2	3	4	5	1	5.
6. _____	5	6	1	2	3	4	X	X	X	X	6.
7. _____	2	3	4	5	6	7	1	X	X	X	7.
8. _____	8	1	2	3	4	5	6	7	X	X	8.

The person in your household that I need to speak with is _____

If "you" → Page 3

To correct respondent

Hello. I'm _____ calling for the SD Dept. of Health. I'm a member of a special research team. We're doing a study of South Dakota residents regarding their health practices and day-to-day living habits. You have been randomly chosen to be included in the study from among the adult members of your household.

B-1

The interview will only take a short time, and all the information obtained in this study will be **confidential.** First, I'd like to begin by asking you about using seat belts. . . .

SECTION A: SEAT BELTS

1. How often do you use seat belts when you drive or ride in a car?

Would you say: *PLEASE READ* (31)

a. Always 1
b. Nearly Always 2
c. Sometimes 3
d. Seldom 4
OR
e. Never 5

DO NOT READ THESE RESPONSES

Don't know/Not sure 7
Never drive or ride in a car 8
Refused 9

SECTION B: HYPERTENSION

These next questions are about hypertension or high blood pressure:

2. Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure? (32)

a. No, *GO TO SECTION C (p.5)* 1

PROBE FOR DOCTOR, NURSE OR OTHER HEALTH PROFESSIONAL

b. Yes, by a doctor 2
c. Yes, by a nurse 3
d. Yes, by other health professional 4
Don't know/Not sure *GO TO SECTION C (p.5)* 7
Refused *GO TO SECTION C (p.5)* 9

3. Have you been told on more than one occasion that your blood pressure was high, or have you been told this only once? (33)

a. More than once 1
b. Only once 2
Don't know/Not sure 7
Refused 9

4. Is any medicine currently prescribed for your high blood pressure? (34)

a. Yes 1
b. No, *GO TO Q 6* 2
Don't know/Not sure, *GO TO Q 6* 7
Refused, *GO TO Q 6* 9

5. Are you currently taking medicine for your high blood pressure? (35)

PROBE FOR "ALL OR MOST OF THE TIME" OR "ONLY OCCASIONALLY" IF NECESSARY. IF ANSWER IS "YES", USE "YES ALL OR MOST

a. Yes, all or most of the time 1
b. Yes, only occasionally 2
c. No 3
Don't know/Not sure 7
Refused 9

6. As far as you know, is your blood pressure presently normal —or under control—or is it still high? (36)

NORMAL OR UNDER CONTROL INCLUDES "RETURNED TO NORMAL" AND "NO LONGER HAVE HIGH BLOOD PRESSURE"

a. Normal 1
b. Under control 2
c. Still high 3
Don't know/Not sure 7
Refused 9

SECTION C: EXERCISE

The next few questions are about exercise, recreation, or physical activities other than your regular job duties.

7. During the past month, did you participate in any physical activities or excercises such as running, calisthenics, golf, gardening, or walking for exercise? (37)

   a. Yes 1
   b. No, *GO TO SECTION D (p.8)* 2
   Don't know/Not sure, *GO TO SECTION D (p.8)* . . . 7
   Refused, *GO TO SECTION D (p.8)* 9

8. What type of physical activity or exercise did you spend the most time doing during the past month? (38-39)

   a. Activity *(specify)*: _____ — —
   See Coding List A
   Refused, *GO TO Q 13 (p.6)* 9 9

ASK QUESTION 9 ONLY IF ANSWER TO QUESTION 8 IS RUNNING, JOGGING, WALKING, OR SWIMMING. ALL OTHERS, GO TO QUESTION 10 (p.6).

9. How far did you usually walk/run/jog/swim? (40-42)

SEE CODING LIST B IF RESPONSE IS NOT IN MILES AND TENTHS

   a. Miles and tenths . . . . . — — .—
   Don't know/Not sure 7 7 7
   Refused 9 9 9

10. How many times per week or per month did you take part in this activity during the past month? (43-45)

    a. Times per week . . . . . 1 — —
    b. Times per month . . . . . 2 — —
    Don't know/Not sure 7 7 7
    Refused 9 9 9

11. And when you took part in this activity, for how many minutes or hours did you usually keep at it? (46-48)

    a. Hours & Minutes . . . . . —:— —
    Don't know/Not sure 7 7 7
    Refused 9 9 9

12. Was there another physical activity or exercise that you participated in during the last month? (49)

    a. Yes 1
    b. No, *GO TO SECTION D (p.8)* 2
    Don't know/Not sure, *GO TO SECTION D (p.8)* . . . 7
    Refused, *GO TO SECTION D (p.8)* 9

13. What other type of physical activity gave you the next most exercise during the past month? (50-51)

    a. Activity *(specify)*: _____ — —
    See Coding List A
    Refused, *GO TO SECTION D (p.8)* 9 9

B-3

ASK QUESTION 14 ONLY IF ANSWER TO QUESTION 13 IS RUNNING, JOGGING, WALKING, OR SWIMMING, ALL OTHERS GO TO QUESTION 15

14. How far did you usually walk/run/jog/swim? (52-54)

SEE CODING LIST B IF RESPONSE IS NOT IN MILES AND TENTHS

a. Miles and tenths . . . . . ___ ___ ___

Don't know/Not sure 7 7 7

Refused 9 9 9

15. How many times per week or per month did you take part in this activity? (55-57)

a. Times per week . . . . . 1 ___ ___

b. Times per month . . . . . 2 ___ ___

Don't know/Not sure 7 7 7

Refused 9 9 9

16. And when you took part in this activity, for how many minutes or hours did you usually keep at it? (58-60)

a. Hours & Minutes . . . . . ___:___ ___

Don't know/Not sure 7 7 7

Refused 9 9 9

SECTION D: WEIGHT CONTROL PRACTICES

"Now I would like to ask you about some of the things you may be currently doing to try to lose weight, or keep from gaining weight."

17. Are you now trying to lose weight? (61)

a. Yes 1

b. No, *GO TO Q 21 (p.9)* 2

c. No, trying to gain weight, *GO TO Q 20 (p.11)* . . . 3

Don't know/Not sure *GO TO Q 21 (p.9)* 7

Refused *GO TO Q 21 (p.9)* 9

18. About how long ago did you begin your current attempt to lose weight? (62-64)

a. Days . . . . . 1 ___ ___

b. Weeks . . . . . 2 ___ ___

c. Months . . . . . 3 ___ ___

d. Years . . . . . 4 ___ ___

e. Always trying to lose weight 5 5 5

Don't know/Not sure 7 7 7

Refused 9 9 9

19. About how much did you weigh when you began your current attempt to lose weight? (65-67)

a. Weight . . . . . ___ ___ ___ Pounds

Don't know/Not sure 7 7 7

Refused 9 9 9

20. How much would you like to weigh? (68-70)

a. Weight *GO TO Q 22* . . . . . __ __ __ Pounds

Don't know/Not sure, GO TO Q 22 . . . . . 7 7 7

Refused, GO TO Q 22 . . . . . 9 9 9

21. Are you now trying to maintain your current weight, that is to keep from gaining weight? (71)

a. Yes 1

b. No, *GO TO Q 27, (p.11)* 2

Don't know/Not sure *GO TO Q 27, (p.11)* 7

Refused *GO TO Q 27, (p.11)* 9

22. Are you eating fewer calories to lose weight, or to keep from gaining weight? (72)

a. Yes 1

b. No, *GO TO Q 25, (p.10)* 2

Don't know/Not sure *GO TO Q 25, (p.10)* 7

Refused *GO TO Q 25, (p.10)* 9

23. Some people count calories. If you are counting calories, about how many calories are you eating per day? (73-76)

a. (Record number of calories) . . . . . __ __ __ __

b. Don't count calories *GO TO Q 25 (p. 10)* 7 7 7 7

Refused *GO TO Q 25 (p.10)* 9 9 9 9

(INTERVIEWER: IF RESPONDENT GIVES A NUMBER OF 10,000 OR GREATER, THEN ENTER 9997)

24. About how long have you been eating this many calories per day? (77-79)

a. Days . . . . . 1 __ __

b. Weeks . . . . . 2 __ __

c. Months . . . . . 3 __ __

d. Years . . . . . 4 __ __

Don't know/Not sure 7 7 7

Refused 9 9 9

25. Are you using physical activity or exercise to lose weight or to keep from gaining weight? (80)

a. Yes 1

b. No 2

Don't know/Not sure 7

Refused 9

26. Are you now doing any of the following to lose weight or to keep from gaining weight?

	YES	NO	DK/NS	REF	
a. taking diet pills to decrease your appetite?	1	2	7	9	(81)
b. taking special products such as canned or powdered supplements?	1	2	7	9	(82)
c. fasting for 24 hours or longer as part of your diet	1	2	7	9	(83)
d. participating in an organized weight control program (such as Weight Watchers, TOPS, or Nutri-Systems)	1	2	7	9	(84)
e. causing yourself to vomit after you eat?	1	2	7	9	(85)

27. Have you been advised by a doctor or other health professional to reduce your weight? (86)

(INTERVIEWER: PROBE FOR DOCTOR, NUTRITIONIST OR OTHER HEALTH PROFESSIONAL)

a. Yes, by a Doctor 1
b. Yes, by a Nurse/Physician's Assistant 2
c. Yes, by a Nutritionist/Dietitian 3
d. Yes, other Health Professional 4
e. No 5
Don't know/Not sure 7
Refused 9

28. Do you now consider yourself to be overweight, underweight, or about average? (87)

a. Overweight 1
b. Underweight 2
c. About Average 3
Don't know/Not sure 7
Refused 9

SECTION E: TOBACCO USE

Now I'd like to ask you a few questions about cigarette smoking.

29. Have you smoked at least 100 cigarettes in your entire life? (88)

100 CIGARETTES = 5 PACKS

a. Yes 1
b. No, *GO TO SECTION F (p.13)* 2
Don't know/Not sure, *GO TO SECTION F (p.13)* 7
Refused, *GO TO SECTION F (p.13)* 9

30. Do you smoke cigarettes now? (89)

a. Yes 1
b. No, *GO TO SECTION F (p.13)* 2
Refused, *GO TO SECTION F (p.13)* 9

31. On the average, about how many cigarettes a day do you now smoke? (90-91)

1 PACK = 20 CIGARETTES

a. Number of cigarettes . . . . . — —
b. Don't smoke regularly 8 8
Refused 9 9

32. Have you stopped smoking for a week or more sometime during the past year? (92)

a. Yes 1
b. No 2
Refused 9

SECTION F: ALCOHOL CONSUMPTION

These next few questions are about the use of beer, wine, wine coolers, cocktails, or liquor, such as vodka, gin, rum, or whiskey--all kinds of alcoholic beverages that people drink at meals, special occasions, or when just relaxing.

33. Have you had any beer, wine, wine coolers, cocktails, or liquor during the past **month**, that is, since_____? (93)

a. Yes 1

b. No, *GO TO SECTION G (p.15)* 2

Refused, *GO TO SECTION G (p.15)* 9

34. During the past month, how many days per week or per month did you drink any alcoholic beverages, **on the average**? (94-96)

a. Days per week . . . . . 1 __ __

b. Days per month . . . . . 2 __ __

Don't know/Not sure, *GO TO Q 36 (p.14)* 7 7 7

Refused, *GO TO Q 36 (p.14)* 9 9 9

35. A drink is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. On the days when you drank, about how many drinks did you drink **on the average**? (97-98)

a. Number of drinks . . . . . __ __

Don't know/Not sure 7 7

Refused 9 9

36. Considering all types of alcoholic beverages, that is beer, wine, wine coolers, cocktails, and liquor, as drinks, how many times during the past month did you have 5 or more drinks on an occasion? (99-100)

a. Number of times . . . . . __ __

b. None 8 8

Don't know/Not sure 7 7

Refused 9 9

37. And during the past month, how many times have you driven when you've had **perhaps** too much to drink? (101-102)

a. Number of times . . . . . __ __

b. None 8 8

Don't know/Not sure 7 7

Refused 9 9

SECTION G: PREVENTIVE HEALTH PRACTICES

Some people visit a doctor for a routine checkup, even though they are feeling well and have not been sick.

38. About how long has it been since you last visited a doctor for a routine checkup?

Was it: *PLEASE READ* (103)

a. Within the past year (0 TO 12 MONTHS AGO) . . . 1
b. Within the past two years (13 TO 24 MONTHS AGO) . . 2
c. Within the past five years (25 TO 60 MONTHS AGO) . . 3
OR
d. More than five years ago (61+ MONTHS AGO) . . . 4

Don't know/Not sure, *GO TO Q 40* 7
Never, *GO TO Q 40* 8
Refused, *GO TO Q 40* 9

39. What type of doctor did you see for your last routine check-up?

Was it: *PLEASE READ* (104)

a. Family or General Practitioner 1
b. Internist 2
c. Specialist such as heart, lung, or stomach specialist . 3
d. Other 4

(ASK FOR WOMEN ONLY)

e. Obstetrician/gynecologist 5

(DO NOT READ)

Don't know/Not sure 7
Refused 9

These next questions are about blood cholesterol, which is a fatty substance found in the blood.

40. Have you ever had your blood cholesterol checked? (105)

a. Yes 1
b. No, *GO TO Q 47 (p.18)* 2

Don't know/Not sure, *GO TO Q 47 (p.18)* 7
Refused, *GO TO Q 47 (p.18)* 9

41. About how long has it been since you last had your blood cholesterol checked?

Was it: *PLEASE READ* (106)

a. Within the past year (0 TO 12 MONTHS AGO) 1
b. Within the past two years (13 TO 24 MONTHS AGO) . . 2
c. Within the past five years (25 TO 60 MONTHS AGO) . . 3
OR
d. More than five years ago (61+ MONTHS AGO) 4

Don't know/Not sure 7
Refused 9

42. Have you ever been told your blood cholesterol level, **in numbers?** (107)

a. Yes 1

b. No, *GO TO Q 44* 2

Don't know/Not sure, *GO TO Q 44* 7

Refused, *GO TO Q 44* 9

43. What is your blood cholesterol level? (108-110)

a. ***Record the number*** . . . . . ___

b. Don't know/Not sure 7 7 7

Refused 9 9 9

44. Have you ever been told by a doctor or other health professional that your blood cholesterol is high? (111)

a. Yes 1

b. No 2

Don't know/Not sure 7

Refused 9

45. Are you now under the advice of a doctor to reduce your blood cholesterol or blood fat level? (112)

a. Yes 1

b. No, *GO TO Q 47 (p.18)* 2

Don't know/Not sure, *GO TO Q 47 (p.18)* 7

Refused, *GO TO Q 47 (p.18)* 9

46. Did the doctor:

46a. --prescribe a medication to lower your blood cholesterol? (113)

a. Yes 1

b. No 2

Don't know/Not sure 7

Refused 9

46b. --provide you with a low fat or low cholesterol diet? (114)

a. Yes 1

b. No 2

Don't know/Not sure 7

Refused 9

46c. --refer you to a dietitian, nutritionist, or nurse to help you reduce the fat or cholesterol in your diet? (115)

a. Yes 1

b. No 2

Don't know/Not sure 7

Refused 9

47. Next, I'd like to ask you about diabetes, sometimes called sugar diabetes. Have you ever been told by a doctor that you have diabetes? (116)

a. Yes 1

b. No 2

Don't know/Not sure 7

Refused 9

SECTION H: DEMOGRAPHICS

These next few questions ask for a little more information about yourself.

48. How old were you on your last birthday? (117-118)

a. *Code age in years* . . . . . — —

Don't know/Not sure 0 7

Refused 0 9

49. What is your race?
Would you say: *PLEASE READ* (119)

a. White 1

b. Black 2

c. Asian, Pacific Islander 3

d. Aleutian, Eskimo, or American Indian 4

e. Other: (specify)_____ 5

Don't know/Not sure 7

Refused 9

50. Are you of Hispanic origin such as Mexican American, Latin American, Puerto Rican, or Cuban? (120)

a. Yes 1

b. No 2

Don't know/Not sure 7

Refused 9

51. What is the highest grade or year of school you completed?
READ ONLY IF NECESSARY (121)

a. Eighth Grade or Less 1

b. Some High School 2

c. High School Grad or GED Certificate 3

d. Some Technical School 4

e. Technical School Graduate 5

f. Some College 6

g. College Graduate 7

h. Post Grad or Professional Degree 8

Refused 9

52. Are you currently: *PLEASE READ* (122)

a. Employed for wages 1

b. Self employed 2

c. Out of work for more than 1 year 3

d. Out of work for less than 1 year 4

e. Homemaker 5

f. Student 6

OR

g. Retired 7

Refused 9

(21)

53. And are you: *PLEASE READ* (123)

a. Married 1
b. Divorced 2
c. Widowed 3
d. Separated 4
e. Never been married 5
OR
f. A member of an unmarried couple 6
Refused 9

54. Which of the following categories best describes your annual household income from all sources? *PLEASE READ* (124)

a. Less than $10,000 1
b. $10 to $15,000 2
c. $15 to $20,000 3
e. $20 to $25,000 4
e. $25 to $35,000 5
f. $35 to $50,000 6
OR
g. Over $50,000 8
Don't know/Not sure 7
Refused 9

(22)

55. About how much do you weigh without shoes? (125-127)

a. Weight . . . . . ___ Pounds
Don't know/Not sure 7 7 7
Refused 9 9 9

56. About how tall are you without shoes? (128-130)

a. Height . . . . . _/__ Ft./ Inches
Don't know/Not sure 7 7 7
Refused 9 9 9

57. *INTERVIEWER: INDICATE SEX OF RESPONDENT. ASK IF NECESSARY* (131)

a. Male, *GO TO Q 65 (p.25)* 1
b. Female 2

B-11

These next questions are about mammograms, which are x-ray tests of the breast to look for cancer.

58. Have you ever had a mammogram? (132)

a. Yes 1

b. No *GO TO Q 60b (bottom of p.24)* 2

Don't know/Not sure *GO TO Q 63 (p.25)* 7

Refused *GO TO Q 63 (p.25)* 9

59. About how long has it been since you had your last mammogram?

Was it: *PLEASE READ* (133)

a. Within the past year *GO TO Q 61 (p.24)* (0 TO 12 MONTHS AGO) . . 1

b. Within the past two years (13 TO 24 MONTHS AGO) 2

c. Within the past five years (25 TO 60 MONTHS AGO) 3

OR

d. More than five years ago (61+ MONTHS AGO) 4

Don't know/Not sure 7

Refused 9

60a What is the **most important reason** that you did not have a mammogram in the last year?

(DO NOT READ LIST. RECORD ONLY ONE ANSWER) (134)

a. Not recommended by doctor / doctor never said it was needed . 1

b. Not needed/not necessary 2

c. Never heard of mammogram 3

d. Cost 4

e. No insurance to pay for it 5

f. Other 6

Don't know/Not sure 7

Refused 9

61. Was your last mammogram done as part of a routine checkup, because of a breast problem, or because you've already had breast cancer? (135)

a. Routine checkup 1

b. Breast problem 2

c. Had breast cancer 3

Don't know/Not sure 7

Refused 9

62. Whose idea was it for you to have this last mammogram - was it your idea, your doctor's idea, or someone else's idea?
(Probe for the most influential. Record only one response.) (136)

a. Respondent's idea 1

b. Doctor's idea 2

c. Someone else's idea 3

Don't know/Not sure 7

Refused 9

INTERVIEWER : GO TO Q 63, PAGE 25

60b. What is the **most important reason** that you never had a mammogram?
(Do not read list. Record only one answer) (134)

a. Not recommended by doctor / doctor never said it was needed . 1

b. Not needed / not necessary 2

c. Never heard of mammogram 3

d. Cost 4

e. No insurance to pay for it 5

f. Other 6

Don't know/Not sure 7

Refused 9

INTERVIEWER: ASK THESE TWO QUESTIONS ONLY OF FEMALES BETWEEN 18 AND 45 YEARS OF AGE, OTHERWISE GO TO QUESTION 65 BELOW.

63. To your knowledge, are you now pregnant? (137)

a. Yes 1

b. No, *GO TO Q 65* 2

Don't know/Not sure, *GO TO Q 65* 7

Refused, *GO TO Q 65* 9

64. During what month is your baby due? (138-139)

Code Months		
Jan 01	a. *Code Month*	— —
Feb 02		
Mar 03	Don't know/Not sure	7 7
Apr 04		
May 05	Refused	9 9
Jun 06		
Jul 07		
Aug 08		
Sep 09		
Oct 10		
Nov 11		
Dec 12		

65. How many telephone numbers will reach this household, including the number I used today?

DIFFERENTIATE BETWEEN TELEPHONE NUMBERS AND TELEPHONE SETS IF NECESSARY. INCLUDE ALL TELEPHONE NUMBERS THAT CAN REACH HOUSEHOLD (140)

a. Total Telephone Numbers . . . . . ___

MODULE 3: CERVICAL CANCER SCREENING

PLEASE NOTE: Ask all females, otherwise go to next module

These next questions are about certain kinds of medical tests and examinations.

1. Have you ever heard of a Pap smear test? (141)

a. Yes 1

b. No *GO TO NEXT MODULE* 2

Don't know/Not sure *GO TO NEXT MODULE* 7

Refused *GO TO NEXT MODULE* 9

2. Have you ever had a Pap smear? (142)

a. Yes 1

b. No *GO TO NEXT MODULE* 2

Don't know/Not sure *GO TO NEXT MODULE* 7

Refused *GO TO NEXT MODULE* 9

3. When did you have your last Pap smear? Was it: *PLEASE READ* (143)

a. Within the past year *(0 TO 12 MONTHS AGO)* . . . 1

b. Within the past two years *(13 TO 24 MONTHS AGO)* . . 2

c. Within the past five years *(25 TO 60 MONTHS AGO)* . . 3

OR

d. More than five years ago *(61+ MONTHS AGO)* . . . 4

Don't know/Not sure 7

Refused 9

4. Have you had a hysterectomy? (144)

PLEASE NOTE: A hysterectomy is "An operation to remove the uterus."

a. Yes 1

b. No 2

Don't know/Not sure 7

Refused 9

SOUTH DAKOTA MODULE: STATE QUESTIONS FOR 1989

1. Is your health care professional located within: (145)

PLEASE READ

5 miles from your home.....1
6-20 miles from your home.....2
21-60 miles from your home.....3
More than 60 miles from your home.....4
Don't know/Not sure.....7
Refused.....9

2. Do you have health insurance? (146)

Yes.....1
No.....2
Don't know/Not sure.....7
Refused.....9

3. Has the cost of health care ever influenced your decision to receive care? (147)

Yes.....1
No.....2
Don't know/Not sure.....7
Refused.....9

4. Do you feel there should be a special place set aside for smokers and non-smokers in restaurants and other public places? (148)

Yes.....1
No.....2
Don't know/Not sure.....7
Refused.....9

5. Regarding smoking in the workplace, do you feel there should be: (149)

PLEASE READ

a. A complete ban on smoking.....1
b. Designated smoking areas.....2

OR,

c. Smoking allowed at anytime.....3
Don't know/Not sure.....7
Refused.....9

6. Do you feel that the smoke from another persons' cigarette has a negative effect on your health? (150)

Yes.....1
No.....2
Don't know/Not sure.....7
Refused.....9

AIDS Questions

7. Have you ever heard of AIDS? (151)

Yes.....1
No (GO TO Q 17 pg 31).....2
Don't know/Not sure, (GO TO Q 17 pg 31).....7
Refused, (GO TO Q 17 pg 31).....9

8. How would you rate your personal knowledge knowledge of the disease AIDS?

Would you say: (152)

PLEASE READ

a. Very knowledgeable.....1

b. Knowledgeable.....2

OR,

c. Not very knowledgeable.....3

Don't know/Not sure.....7

Refused.....9

9. Can a person become infected with the AIDS virus by drinking from the same glass as a person infected with the AIDS virus? (153)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

10. Can a person become infected with the AIDS virus by sharing a syringe and needle with a person infected with the AIDS virus? (154)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

11. Can a person become infected with the AIDS virus by kissing a person infected with the AIDS virus on the cheek? (155)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

12. Can a person become infected with the AIDS virus by working with a co-worker who is infected with the AIDS virus? (156)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

13. Can a person become infected with the AIDS virus by having sex with a person infected with the AIDS virus? (157)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

14. Can a person become infected with the AIDS virus by donating blood? (158)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

15. Do you think people who are infected with the AIDS virus should be banned from working in banks and stores or attending school where people come into brief contact with others? (159)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

16. Do you think blood transfusions that are received in hospitals, are safe from the AIDS virus? (160)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

17. Do you know anyone who has been a victim of family violence, that is, physical or verbal abuse? (161)

Yes.....1

No.....2

Don't know/Not sure.....7

Refused.....9

18. If you were a victim of physical or verbal abuse and wanted to seek help, where would you turn first? (162)

Would you say:

PLEASE READ

a. A Crisis line or Hotline.....1

b. A Safehouse or Shelter.....2

c. A Womens Resource Center.....3

d. The Police.....4

e. Clergy.....5

OR,

f. Another place, Please specify_____.....6

Don't know/Not sure.....7

Refused.....9

19. Which of the following services are available in your community for victims of physical or verbal abuse? Please respond after each item:

PLEASE READ

a. A Crisis line or Hotline	Yes...1	No...2	Dk/Ns...7	Ref...9	(163)
b. A Safehouse or Shelter	Yes...1	No...2	Dk/Ns...7	Ref...9	(164)
c. A Womens Resource Center	Yes...1	No...2	Dk/Ns...7	Ref...9	(165)

CLOSING STATEMENT

That's my last question. Let me emphasize that your answers cannot be identified with your name. Everyone's answers will be combined to give us information about the health practices of people in this state. Thank you very much for you time and cooperation.